

PLANT ANATOMY Lecture 6 - Flowers

- I. Flower structure - composed of four whorls of modified leaves (sepals, petals, stamens, and carpels)
 - A. Receptacle - holds it all together
 - B. Sepals (calyx) & petals (corolla) - together called the perianth
 - C. Male and female parts
 - 1. Male (androecium) - stamen: anther & filament
 - 2. Female (gynoecium) - carpel or pistil: stigma, style, & ovary
- II. Variations in floral structure
 - A. Completeness of flower
 - 1. Complete flower - has all four sets of floral "leaves"
 - 2. Incomplete flower - lacks one or more of the four sets
 - B. Perfectness of flower
 - 1. Perfect - has both male (staminate) and female (pistillate) parts
 - a) Referred to as monoecious
 - 2. Imperfect - lacks either the male or female part
 - a) Referred to as dioecious
 - C. Symmetry of flower
 - 1. Regular or radial- petals are of similar shape and radiate from center of the flower
 - 2. Bilateral - parts arranged so that perianth can be divided into two equal parts
 - 3. Irregular
 - a) Whorls with dissimilar flower parts
 - b) Parts do not radiate from center
 - c) Parts not equidistant from each other
 - D. Ovary position
 - 1. Superior ovary - gynoecium (female stuff) is above perianth and androecium (other stuff)
 - 2. Inferior ovary - ovary appears to be below the perianth and stamens
- III. Monocot vs. dicot
 - A. Monocots in units of 3's
 - B. Dicots in units of 4's or 5's

